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## FIG. 1

10 30 50  
GTGAAGAACGAAAAACCTTCTTTGAAGAGCTTTACGAGGCTTTAGAGGAAACCCACGAC  
M K N E K T F F E E L Y E A L E E T H D  
70 90 110  
AACACCGATGCCACTAGGGGGTCAGATAGGGGGTCAGAGGACTTCTTCTTGCCACCGAC  
N T D A T R G S D R G S E D F F L A T D  
130 150 170  
CCCCCTCCAGATGGAGGTGCCGAAATCGCCTCGCGAAGGGCTTTACATACCAAAAAGAG  
P P P D G G A E N R L A K G F T Y O K E  
190 210 230  
GCACTTAGGATTGCTTTACCCGAGAAAGACCATGAGGCTTTCTTTCTCTGTTGGGGCC  
A L R I A L P E K D H E A F L S S V G A  
250 270 290  
CCCCCTATACCACGAGTGAACCCCCGTTGGGAATGTATGTCAAGCCGTCCAGGACGGG  
P P I P P A E P P V G N V C Q A V Q D G  
310 330 350  
CCTCAGAAGCTTCTGGAACCTCTCCAGGAGATTGCCCGCTCCACCATCCCTACGGCAAC  
P O K L L E L L O E I A R S T I P Y G N  
370 390 410  
CGGGAGCTCTGGAGGAAGGTGGGGACGGTCTTTCATGGTCCCCCTGGAGATGTTGGCC  
R E L W R K V G T V V F M V P L E M L A  
430 450 470  
CTCAACCTGGGGGTCAACCCGGCAGACCGTCCACGCGCTGGAAGAAGGTCTTGAGAAAAAG  
L N L G V T R O T V H A W K K V L E K K  
490 510 530  
GGCCTGGTGGCCACCGACGCTCTTCAACAAACCGTCAACGGGGAGCGCCGGGCCATCGGC  
G L V A T D V L H O T V N G E R R A I G  
550 570 590  
ACCCTTTGGGCCGTCGGCTGAGGCCAGGAAAGCCAGGCTCACCTGGACGACTACATC  
T L W A V R L R P G K A R L T L D D Y I  
610 630 650  
TACCCCTGGAGGAACCTCGCCCTAGACATGGCCAACGGCGTGCTCTCCTTCAACTGGGTC  
Y P W R N L A L D M A N G V L S F N W V  
670 690 710  
AAGGCCTACGAGACACGGAATCCGCCCCACCGTGGACGTGCTGGTCTCTGGGCTCAG  
K A Y Q D H G I R P T L D V L V L W A O  
730 750 770  
GGGAAAAGGGTGATGCCCAACCAAGACCGTGCCGCTGACCTGGGCTCATCTGGTC  
G K R V M P N T K T V A V D L G L I L V  
790 810 830  
CTCCCCGAGGTGGAGCGTTCCAAACTCCGGCCCTTATCACCTCATTGCTACGTACATT  
L P E V E R S K L P A L I T L I A T Y I  
850 870 890  
GCCGATCTCCTAGATGACCGTCTTCAAGACGTTTCTATGCAGGCTTGCTGTGGGCTGTG  
A D L L D D R R S R F Y A G L L W A V  
910 930 950  
GCCAGGGGTGAACCTCCCGCGCAATATCTATTTGCCGTCCTAATGCGGGTTATCCGAGAT  
A R G E L P A Q Y L F A V L M R V I R D  
970 990 1010  
TACACGGATGGCCATCTGACAGACCGGGAGCGTACCTAGTGAAGACCTCAAGGAGGCC  
Y T D G H L T R P G A Y L V K T L K E A

TCCTGA

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*FIG. 2*

1 CTATAACGGCC<sup>\*</sup>TTT<sup>\*</sup>AGGAGGGGGATTGCCAGCCGCTGGGCTGACGGT<sup>\*</sup>TATTTGGACC<sup>\*</sup>  
61 CATAAAAAGCGAAACCGAGCGGTGCCCCGGATCACCCCAAGACCTAGGTAACGCC  
121 TCGGGCTCCAGATGACAAGGAGGTCCGAGGTTGAAGAACGAAAAACCTTCTTTGAAGAG  
M K N E K T F F... (RepT)

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FIG. 3A

1 tctagaaggt cagggtagac aaggaaaaca ccatagcccc tgccaagaag atggacgagt  
61 tgggtgccgg aaaagtggcc atccggggcg ctcctgacaa ctattttcca gcggtggcca  
121 ccggcattgg ccacgaggta cgagcttggt gagtagacgg ccacaaaggg gtcgtcctca  
181 aacttctttt ctagtccgcg ttggacgaag gggaggaaga ggaaaggctt catggcctca  
241 cctccttccc ctcctcttg gcggccttag cggcgtaaaa ctctgagacg gcctgaagtt  
301 tagggatttc gctttcgggg ataagaatcc ggcggctcag gggatgccgg atggccctta  
361 tccgcccgtc ccttaigtac tcgtaaatgg tggccttggg tactttaaac cgttctgaaa  
421 ctctctaac agagagcaca aaacctctaa aaacctatca atcccaccga ttccagtata  
481 ccataaatgg cacaaggttt tgagaagggt gtcaaacaaa aaggctttct cggtcagggt  
541 atgggtgagg gggggcggtc aaaggccgac ttaagtttgg taaagccggg aggaagcaaa  
601 ccgggggtgt accatgcaac agatggccga gtggaacgtg tggacacaga gaagcgttga  
661 gcttctggag aagggttatt tggataaact actgcaggtc tataaagggg aaagtggctc  
721 ttcgaggta gtaccagagg aggttagagga aaaacttcgc gaggcctaca aggcatacga  
781 ggggagggcg gatagtcggg aggcagaaac gaaactcgtg gaagccgtgc taaatgccag  
841 aaaaaaggct gagcggctcc ccttcaatca cccctaccgt cctttggtct actacctgtt  
901 ttcggaaaaa gcagaaaaag cgaacaaggc ccttgaggag gcattgcagg aggttgcctc  
961 aaagcaccca gaaccatcc gcgtcctggc caaggaagcg caaagaagag gcgtagaagc  
1021 ctgatccaa aggtcgaagg agcctccgga aataaatcgg cagataggcg cgatgtcaa  
1081 aagggtgtac aaagaagagc taaaggggaa aatagaagag aggcctccag gccctaccaa  
1141 accaaagatt gtggtagtat cccctgaaaa aagtaaacgg gagcaagcac ccttatttgc  
1201 ggagagagaa gcgggcatac tcataatcac gggatcggat gaagccttga aagatgccgc  
1261 caaggaaaac ctgggccttg gcgaggaagc agaactaggc accaagggcg tagatttcta  
1321 cgtgttcac cggcgtagcc ctgaagagac atggcaccta acaggagaag tgaagttica  
1381 atccgacttt ggcggaaacc aagacaacca gaaactagta gcaaaaggct ccataagggt  
1441 ggaccttgag aagaggcaca taggaatagt ggtggtggac ggaatgcctg tggtagcaaa  
1501 gtttctggg tgggcccggc tggggaagaa aacgatcgtt acatccgtac tctccttcc  
1561 agacctgata gcggagctct accaaaaggg tgaagaagcc ctgggcctct agaaggcgga  
1621 cacaatctca aactgtgtct gtacgtggg gaaatcctct aacacccttc tagtgaaggc  
1681 ttgaccgcc tcccaggagg catctatgcc gatggatcgc cgttttaaga ggggtgaggc  
1741 tataagcgtg gtaccggagc ctgcgaagg atcgagcact aaatccccct cgttactccc  
1801 tgtttggacg atgagcttga gatgtccag atttttctcg tgggggtatc gcgggtacgg  
1861 aggatccttg aactgccaaa cgtcctggag ctcttctccc ttcttcaggc gatcccgagc  
1921 gtaaaccttc ttccggcgca cccggttctt tgaccagaca ataagccctt gagcgtctag  
1981 ctgctcaagc ttctccgggg gatagcgcca atggcgtcca ggagggggaa gtattcctcg  
2041 ccaaggcctt ccggtagggc catccttggg ttctccagga gcattgcagg gatgtgtgt  
2101 gtaccgttcc ccgttctct ctacaaaggg gaaaagccta gcgatctct ctccgaata  
2161 ggggctagcc gatctgttcc aaacgtatgc ccgctgtttg gagtagacga ggtatcatgc  
2221 cttttgcgat ccgaaggcct tccgggaaaa gtttttggga ttgaagcga tgcgggcgat  
2281 atggttaacg aagtttgcc ggccaaagac ctcatcaagg atgagcttca cctcgaacc  
2341 gtatttctcg tctatgtgaa cgaagatcag tctgtagtc ccactcagct ccttgagaag  
2401 tatcaagcgc tccctcagga actccacaaa ctgaggacca tggagggtgt catcgtagcc  
2461 caactgaccg tttttgggtt ggcgtacggg agcaacgcga tctgttctat cgcggccaac  
2521 gagaaactgc tggccgggtc cataaggcgg gtcaatatag accaacttga ctttcccgc  
2581 ataccacca ggtcccggga gcatccaccg gagaacctga ccgttttccc ccaaaaagta  
2641 ggtgccaaata ggtatcaatc caaaaagggg ggcatttccc cctaggaaga ggagggttc  
2701 ttttcgcaaa acaagttgtg ggttgggtcg atcaagaatc tcttcttct cgcgttttcc  
2761 ggggtagacc aacctaaagg gcgaaggctc cgagggttcc aggccttca agggggcttt  
2821 tgggtcaaaa ccagggttagc tacggctcat tcttcttcc ccacagcgt ctttagcagg  
2881 acctcatcac ccacaacct cagcactcc aaccaaggaa tccgccaag gcggcttacc  
2941 ttttgagccc glatcttccc ctgacgtata gaccttcgga tctgtcagg gtcacccga  
3001 aggatgtctg caagctctc ggggttcagg tacacgggt tcatctcat gacacaacct  
3061 taccacacag aggacaacac atgcaactat gggcaagta gacaacgaga ccaaaagctt  
3121 gggccactct ctgaggaggc ctcttgagg gtcttacta ggtacgttcc cgtctgttc  
3181 agatggccat ccgtgtaac tgggataacc cgcattagga ggcgaatag atattgcgg  
3241 gggagttcac ccttggccat agccacagc aagcctgcgt agaaacgtc tgaacgagg  
3301 tcatctagga gatcggaat glactagca atgagggtga taaggggcgg gattttgga

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FIG. 3B

3361 cgctccacct cggggaggac caggatgagg cccaggtaaa cggccacggt ctgggtgtg  
3421 ggcatcacc ttttccctg agcccagagg accagcacgt ccagggtggg gcggattccg  
3481 tggctctgtt aggccttgac ccagttgaag gagagcacgc cgttggccat gtctagggcg  
3541 aggttcttcc aggggttagat gtagtcgtcc aggggtgagc tggctttccc tggcctcagc  
3601 cggacggccc aaagggtgcc gatggcccg cgtcccccgt tgacgggttg gtgaaggacg  
3661 tcggtgccca ccaggccctt ttttcaagg accttcttcc aggcgtggac ggtctgcccg  
3721 gtgaccccca ggttagggc caacatctcc agggggacca tgaagacgac cgtcccccac  
3781 ttctccaga gctcccggt gccgtagggg atgggtggagc gggcaatctc ctggaggagt  
3841 tccagaagct tctgaggccc gtccctggacg cttgacata cttcccaac ggggggttca  
3901 gctgggtgta tagggggggc cccaacagag gaaaggaaag cctcatggtc tttctcgggt  
3961 aaagcaatcc taagtgcct ttttgggtat gtaaagccct tcgagggcg attttcggca  
4021 cctccatctg gagggggggc ggtggccaag aagaagtcct ctgacccctc atctgacccc  
4081 ctagtggcat cgggtgtgtc gtgggtttcc tctaaagcct cgtaaagctc tctaaagaag  
4141 gttttttcgt tcttaccct cggacctct tgtcatctgg agcccgaggc gttaccctag  
4201 gtcttggggg tgatccgggg caaccgcctc ggtttcgcct tttatgggt ccaaaataac  
4261 cgtcagccca ggggtggca atcccccctc ctaaaaggcc gttataggcc ctgctaggag  
4321 gggggtagta ctctctacc cccctaggct tggagaggcc ttaggaggtc tcttagggcc  
4381 tcgtgggggt gtaggggtaa cctcatggcc agggcgccg gctcgggact ctggaggagg  
4441 cctccatagc ctactcgtg tggagggttg tgaagggtt cactaatgca tacggctagc  
4501 ctcgggatca cggccaaatg gtatgcagg tttggtataa aaccctcagg tttagggcta  
4561 gtttatgtcg gttttatgca cctttagctc ggtacacggg cataaacacc agtttctgc  
4621 acgaaagaaa acttctcga tctaagaggg ggaagagggt gtagagggac ggccttcatg  
4681 aaagtggcc tcttaggagg ccgttgtaga gggccgtctc ggggtcaaat cctttccctc  
4741 tcttccagg tttccgagg tccaggctct ggtccaggtc ttgtaccaag ttttgacca  
4801 aagtctattc tcggaatata ggggtatctt gttatcttc cctacgggat atctctgtct  
4861 gtgtgaactt gatcccatcc caatacatat ctcaatctcc taatctctc tttcttccag  
4921 atccctaate tcttcttcta cctcttctc ctcccaatta agaattggga ggaataacc  
4981 cgaccagaac gagcttctcg gggtcagttt cggtaatctc gggacagggt tcatcgtct  
5041 aggacgagga ttagggcattg aaaaatgggc ttgacaaaa tcttctctaa aaatactcc  
5101 cgagggtggg gaagtgcctt cgggggagag atttttggca gtttagatgt tatgctctat  
5161 cacgggcccg aggcctccac gataagttgt ctggccaag taccgggcca ggtcgggggt  
5221 gctcttcagc gtggtgatgg tactttcacg gaagttcaca agtcttcta gaggcttcag  
5281 gtcggggata gtgctcaagt actcccaagc gtctcgggc ccgtggtcgg ggagaaggac  
5341 aaagggtcgg ggcataaagt catctttgta cttaggacgg attactttag cacctgataa  
5401 cttaggggc gtaagaagg gcctcacctc ggagacgggt ggaaggagga cgtgggcgtg  
5461 gaagaagacg aaccggatt tttgggaagt ctccctccag ttgatgatg aacgttggga  
5521 ggaagccggc caggatgtct ttcatcgcgc ctgaacctc ggacacataa aaaacttccg  
5581 tgtttgtcag ggcaagagt ctatgtatga ggtaccttc gggagtacaa agtgccctcaa  
5641 gccgccttcc ccaacgcctc aaaactctag ggtcagggtg tttaggtttt ctgaaaaact  
5701 ctacttttc agtggctatt cctcacccct ctgacacgta ctctggaagg taaacctttg  
5761 acacagcggc caagtctagc gtctccaggt ccagttggc tgggacgct gagaagggga  
5821 ggggcttggg gtagaggacc agaagacc

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FIG. 4

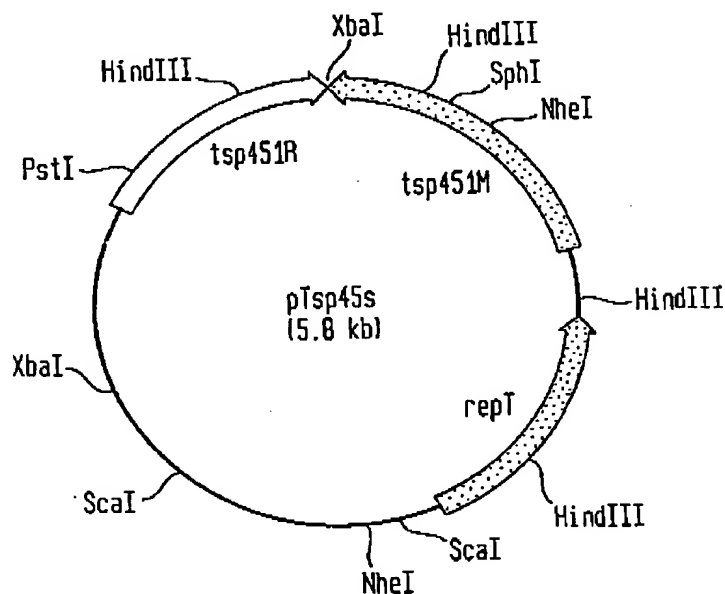


FIG. 5

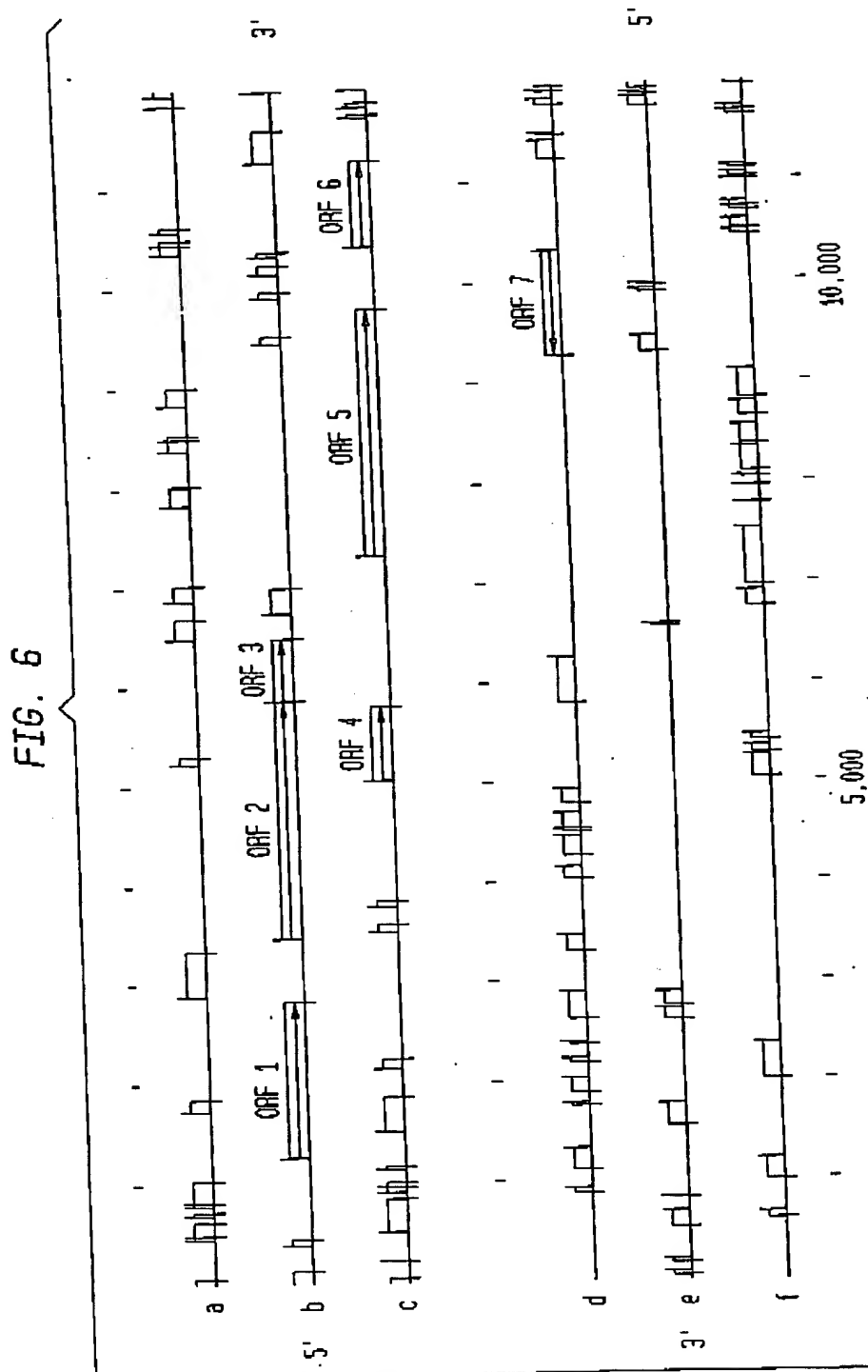
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1  ATGATCGTGGCTGTCAACGGCTTCAAGGGAGGGGTGGGGAAGACCACCACGGCGGTCCAC
   M I V A V T G F K G G V G K T T T A V H
61  CTGGCTGCTTCTGGCCGAGCGGGGCCCCACCTGCTGGTGGACGGGACCCCAACCGC
   L A C F L A E R G P T L L V D G D P N R
121 TCCGCCACGGGTGGCACCAGGGAGGGGAGCCCTCCCGGTGACCGTGGTGGACGAGCGGGTG
   S A T G W H R R G G L P V T V V D E R V
181 GCGGCCCGGTACGCCCGGGAGCACGCCACGTGGTCATAGACACCCAGGCCCGCCACG
   A A R Y A R E H A H V V I D T Q A R P T
241 GAAGAGGACCTCCGGCCCTCGCCAAGGGGGTGGACCTGCTGGTCTGCCACGTCCCCC
   E E D L R A L A K G V D L L V L P T S P
301 GACGCCCTGGCCCTGGAGGCCCTCCTGGCCACCTGGAAGCCCTGCGGGGGCGGAGGCC
   D A L A L E A L L A T L E A L R G A E A
361 CGCTTCGGGTCTCTGACCATGGTGGCCCCGCCCCGAGCGGGACGGGAGGAGGCC
   R F R V L L T M V P P P S R D G E E A
421 CGGGCCCTCTGGGGCGGAGGGCGTTCCCTCTTACAGGCTGGGTGAGGCGGGCGCA
   R A L L G A E G V P L F T G W V R R A A
481 GCCTTCCCCAAGGCCGCCCTCCTGGGGGTGCTGTCTACGGGTGCCCGACCCAGGGCG
   A F P K A A L L G V P V Y R V P D P R A
541 AGGCTGGCCTGGGGGACTACGCGCGGGTGGGGGAAGAGCTCCTGAAGGAGGTGGGGGA
   R L A W G D Y A R V G E E L L K E V G G
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FIG: 7A

CTTATACACAACTATACAGTCTCTATCGGGCTTTCTTAGCGCCATGTAAACACC 60  
CCTCCCATCTCCGGGTGTTTACAGCGGATACGGGAGGTTACGGGGAACCTTTCCCTTG 120  
TTGAAACTTTGGGCTCTGAGGCTCAACAGCAGAACAGCTTAGGTTGACTCAACACAGCTC 180  
ATAAGTCCCTTCATTATCGCTGAGTCAACCTATGAGTTAACCTTTTTCAAGAAAAGA 240  
GATAAGTGAGTTTTGTCTCTAGCAGGACTTTTTCTTTGAGTCAACCTCTGTGCGGACC 300  
CCCCGATTTTGAAGTCAACCCCTTTGAGCCGAAACTTTGTTGGCAGGGGTTGACTC 360  
AGGGGTTGACTCAACCGGAATGGCTCTGGAAGGGGTTGAGCCGACCCCTCCCTCGTG 420  
GCGGACCCCGCTCCACTATGAGCAGGGGGAAAGTTACGGGAAAAGTTCCCAAGTCCC 480  
CCTTGACAAAAGATGACAATCGAGTTAATGTACAGCGATGCGTCACTACCTCTGGCTG 540  
GGCTCACCAGATGCGTGGCGAAGCTTTCAGAGCCTCCTTCGATTCTGGCCAGGGAGG 600  
GGCGCTACCCCACTGGTGTAGAGCTCGCCAAGGTGCTGGGGCGCAGCCGACGCCACGT 660  
GGGCCATGCTCAGGGCTTTGACCGTCTAGGACTCGTGAACGGCAGGAGGGGTTCTATG 720  
TTCTGACCCCTGCGGGCTAGAAGTTGCCAGGACCTGGGAACACCGTGTGGCGTGGGG 780  
ATGAGGAGGTACAGAGCGGTTACAGTGTCTAGGAGTGGGTCTGCGCCGAGGACAGGC 840  
GCTGAAGCTTTGAGCCGGGGCCCTCACCAAGGCCACCCGGCTCCTCTCCCTGGGAT 900  
CCCAAATGGATCCCTCAGCGCATTATCCTCCTGGCGGTCTATAGCGCAAGGAGTAGT 960  
GGTGACGAAACACAAATGTTTACCCACCTTTTGATGCCGTAGAGGAGCTCGCTCG 1020  
CCAGATTGCTGAAACGCTAACAAGGCTTATTCAGCCATTTAGGCAGATTGTCAAAGT 1080  
CCTGCGCGCTGAGGTTCCCGACCTCTACGCTGGCTGGCCGCCCTGGATGACTCCGCCAT 1140  
CGAGGAGCTTGCCAGCGCTGAGGGAGGTCGAGGGAAGCCCCGCCCCATTTCACCGC 1200  
CGCCCTCAAAAAGGCCCTGGCCATCGCCCTACAGCGCGGACCTCGCCGAGATGCCCCC 1260  
CACGTTGCGCAACGCGCTCCGCTGGGCGATGGAACGGCAAGGGGTGAGCATCGCAAGCT 1320  
TGCGAGAGAGTAGGGTCAGCAAAACCACTGTTAAAAAGTGGCGTGGAGGCCGCTTTGT 1380  
CCCTCGTTCACGGACCTACGTGAGGAGGTTGGAGGAGATCCTGGACCTCCCGAAGGCGC 1440  
CCTTTCGGGACGACTACCCGCTGGGGGTGCCCCAAAATATTGGAAGGTGTTGAGGGGAA 1500  
AGATGCCCCCTTATCCCGGGTTACGCGGACCTTCTGCGCGTGGCCGCCCTGGCGCGCTA 1560  
CGGCCGCCCGTGGGATGATCTCTCTCCGACGAACAGGAGGCCCTTCGGCGCGAGGACGA 1620  
AGACCGGTGAGCCGCTCTCCAACCGCCAGAAGCGAGTGCGAAAGGCCAGTCAAAAACC 1680  
TTTTCGGCTTTCTTTGACGAGTGGCCAACTGAGGCTCGCAAAGAATGGGAGGACTACGA 1740  
GCGCTATGCTCATCGGACCTGGGAGCATCGCGCGGTGCAGGCGGCGCTTGGGGGCGC 1800  
ACCTCTCGCTCCACGACCGTGGGACGGAAACGCTCGAGCCTGAGCGGATACTTATAGA 1860

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FIG. 7B

1861 ACTGTTCTACGGCTACTGTGTAACGAACGGGGCTCGACAGCAACGGTTGAGCCTCGC 1920  
1921 CCTCTCAGACCTGGAGCTCGTCCAATCGTACCTGGAGTGGCGGTGAATAGGTACAA 1980  
1981 GGACGAGGATTTACCCCCGTACTCGATCGGAATACATGTTATCGCCCTGGTGA AAAA 2040  
2041 ACTCCACAGAGGTTATCTCCGCGCCCTTGGGCTTGGGTAGACCCGGACGGGTGAAAGA 2100  
2101 GCTGGAACGGAAC TGA AAATCGCCGGAATTGATGTCACGGACGGCTACCACGGGTGGA 2160  
2161 GCCCTCCTGGAAC TCA CSAGCCCTCCGCTGGGTGCTGGATGGCATCCGGCTCATGCT 2220  
2221 CCGCGATCGCGCGGGCGGGTAGGCAACCTGCTGACACCCAAATCCCACCGCCAAAAG 2280  
2281 CGAAGCGGGCGAAGCGTTCCGCTCTACCGGACGTCGTTCTGCTTTGGATGATGGTGGG 2340  
2341 CCACCCCTCCGGGCGAAGCATTACTACGAAGCTCGCTTGGACATGAGCCAGTTCCAAGA 2400  
2401 CGGGGATTTGCTCCCGGCGGGGACACGTGGGGCGGGCCGGCGAGGGTACTACCTGGC 2460  
2461 CTACCGCAAAGTGGAGTTCAAAACGCGCGAGGCCAGGTCTTTCAGAGCCTCCAGGACCA 2520  
2521 CGATCTGTCACGTTCCCCCTGGACGACCCGAGCACCCTGCTGCTGCTTGGACGTGAA 2580  
2581 CGGGATGCGGTACTCCCTCAACGAGCTCTTTCACGCTACCTGCGCAGATCCTCTCCCG 2640  
2641 CCTGGCCAGGCTGGGCGGACCGGCTCCCTCCTGCCCCTGTTCCGGGTGCGATACG 2700  
2701 AGGCTCAGACTTGGCAGATCGTTTCGAGGCGCGCCGCTACGTGGCCGCGTGGCCCGG 2760  
2761 GTACCCAGAACTTTTGCCCTTCGCCCCCACTCCATCCGCCACGTGGTGGCCACGGAG 2820  
2821 GTCGTGAAGCGACGGGCTCTTTGAGGCGCGCCCAACGTGCTCCTGSATAGCATAGAC 2880  
2881 ATGGTCGTTGACATTACGCCCCGTTGTTCCCCCGACCGTAACAGTCACGGTTGGCGGG 2940  
2941 CTAACGCCCGCGCCCGGGGAGGTGAGCGGTGAGGGACCTCCACGACTTTTCTGCCCCG 3000  
3001 GGTGGACGAAGTGGTGCGGAACCTTACCCGGGGCGCGGGGTGGGCGACGAGTGGCG 3060  
3061 GCGGGCTCGGTCCAAGGCGAGCGGGCGACAGCCTGGCCGTGGACCGCGGAAGGGCTT 3120  
3121 CTGGATCGACCACAACCCCTCGGCCCCGAGCCCCGCGAGGGAACCTCTCACGCTGAT 3180  
3181 CCAGGCGGCCAAGGGGCTCTCCCCGAGGAGGCCCGGCGCTGGGCCAGCAGTGGCTTG 3240  
3241 CCTCTCCCTTCGCCAAAGGTCAGGCGGACGAGGAGCTCAGGACCAAGGTCTTGAGTAC 3300  
3301 TCAAGTGCCTGGAGCTCGGGTCTCCAGTCCCTGAGTCTTCAGGTTCCAGGTACCTGA 3360  
3361 GGAGTCGGACCCCTTTGACAACCCCGCTTCGGGACCTCCTACCCCGAGGGCGAGGA 3420  
3421 CGAGGCCCTTGGCCCCGGCTCCGAGGAGGTGCTGCGGCGCATGGTGTCTAGGCTTCT 3480  
3481 CCGACCCCGAGGCGGTGGCTACCTGAAGGGGCGGGTCTGGATGCCGGGTGGTCCG 3540  
3541 CCGCTTCTACCTCGGCTGGACGACACCGCGGGGCCACCGCGCCCTGGTCTACCCGGT 3600  
3601 GATAGGGCGGACGGCTCCCCGTTCCGCGCCACCTCTACTACGAGATCCCCGGCTCAC 3660  
CCAGGCGCCCCGGGCAAGGGCTGGGGGAGGGGAGGCCACCACTACTGGGCCCTCCC 3720

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FIG. 7C

3721 CCCCTTCGAGGGCCCTCCCCCGCCGCAAGCTCTTCTTGTGCGAGGGGGCGAAGGATGC 3780  
CTGGGCCCTCTGGCTCCACCTCCACGCCAGCCCTGGGCCAGGACCTGGCGGTGTGAC 3840  
3781 CTCCACGCACGGCTCCGCCCTCCCGAAGGCTGAAAGACCCCTGTTCTGGGCCCTTG 3900  
3841 GGAGGAGGTCTACCTGGGCCAGGACCCGACTCCGCCGCGAGGAGATGGCCCGAAGGT 3960  
3901 GGCGGAGGTGGCGAGGCGGCCGTCCGCCGCGTCCGGTCCCGAGGGGATGGGGAAGGA 4020  
3961 CTGGACGGACTACTTCTGGCGGGGGCACCCCGAGGGCTTGCGCTTCTCTGGAGGG 4080  
4021 AGCGGAGGTCTGGGAAGAAGTGGCTGGAGGTGGGGCAGGATCCAGTCCCGGACCC 4140  
4081 CGTGGACATCCAGCGGGCTTCTGGCGGGGCCACCTCTACGTCCTCCGTGCGGTCTTGA 4200  
4141 GAACCGGGGGGAAGAAGGGGCCGCTACCGCACCGTGGTGGTCCGCTCCGACGGGCCGT 4260  
4201 CCTGGGCTGGGGCTACTTGGCGGGCCCGCCGGCACCCCTTGAGGACCGGGTGTGGC 4320  
4261 CGTGGACGACGGCACCATCATCCGAGGCCCGAAGGCGGCCCGGACCTCGTGGAA 4380  
4321 CGGGGAGGCATCAACGCTTCTGGAAGCCCGGGCCCGGGAGTGAGGCCATGACCGT 4440  
4381 GGCCCCCGGGACCTGCTGGGCTCATGTCGCCACCTCCGCCAGGTGATCTCCCCAG 4500  
4441 TGAGGACGGCTACCTCTGGCCGCTTAGGGGTGATGACCTCTACGTGACAGCGTCTT 4560  
4501 CGACGCGTGGCCCTCTTCTCGTGGTGGGCCCGCCGGGCTCGGGGAAGACGGAGTTCGC 4620  
4561 CCGCCATGCGCGAGCTGGGGCCAAACGCGTGGTATCAGCGCCAGACCTCCGCCGC 4680  
4621 CACCGCCGCCGATCATCGACGAGACGGGGGGCTGGTGGCTTCGACGACCTGGAGGA 4740  
4681 GGTGCGCCAGCGGTGGGGAGCGCTGAGGCTCCAGCTGGAGCAGTTCTCAAGGTGTC 4800  
4741 CTACAAGAAGGAGACCGCGTCAAGAGCTGGACGACACCAAGGGATGCGGGTCTCAC 4860  
4801 CCTCAACTTCTTGGGGTCAAGGTGATACCAACACCCAGGGGACGGGGACATCTGGG 4920  
4861 GAGCGGATGCTGGTCACTCCGACCGCCGCTCCGGGACCTGGGCAGAGGGAGGAGCG 4980  
4921 CCGCCCCGAGGGGCTCTCCCCCAGGCCCTCCAAGAACTCCGGGACAACCTCTACATCT 5040  
4981 GGGCCATGGAGAACGCGCCAGCCTCCACGCCCTGTACCGGGAGCGCTTCGCGGGCAAGG 5100  
5041 GGGAGCGCTGGACGAGATCGCCGCCCTTGGTACCATCGCCACCACCTGGGGGACG 5160  
5101 AGGAGCTGGCGCCCGCTGGAGGACGCCCTGGCCGGCAGGAAGGCGCTGGAGGAGA 5220  
5161 CCTTTCCGATGCCGAGGTGGTGGAGACCGCCCTCAAGGAGGCATCCGCCAGGGCTACC 5280  
5221 GGAGCCACGTGGCCCTGGTCCACGTGATCTCCAGGCCCGGAAGATCTTGGGGACGACT 5340  
5281 GGGGCCGGGAGCGACCGTGGACATCCCCGGTGGCGGGACCCCAAGTGGTGGGGCAGA 5400  
5341 TCGCCAGCAACTACGGTGGGCGGCCAGAAAGGCCCGTGAGGCCCGGGCTTTGGGACA 5460  
5401 AGCAGTTCGCGATCATGCGCTGGAGCCACCTTCGTGGAGCGGTGGTCAGGGGCTTCC 5520  
5461 TCCAGGAGGGGATCCCTTGGAGCCCTGAAGCAACCCCTGGCTTCTGCTGGACACCC 5580

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FIG. 7D

5581 CTGCCCGAGTGCCTACCTGCACTGGTGGACCTCCGGCTGACAAGGAAAAGTGGCT 5640  
5641 GGAGCGCTACGGGGAGGCCAAGCTGGCCAGAAAAGCGGGAGCTGGAGGAGGATTTT 5700  
5701 GGCCCTGGTGGGGCCCAAGATGGCTTGGCTCCAGGCTTCCGCCAGGAGGAGGAGA 5760  
5761 CCGAGGTAAGCACCAAGTACCAAGTACCAAGACCTAAAGCTCAGGTACCGAGGA 5820  
5821 CCTCGGGACGGAGGACCTAAACCCCAAGGGCTGAAAGACTGAGGTGAGAGGATGAT 5880  
5881 CGTGGCTGTACCGGCTTCAAGGGAGGGTGGGAAGACCACCACGGCGGTCCACCTGGC 5940  
5941 CTGCTTCTGGCCGAGGGGGCCCACTGCTGGTGGACGGGACCCCAACCTCTCCGC 6000  
6001 CACGGGTGGCACCGGAGGGAGGCTCCCGGTACCGTGGTGGACGAGCGGTGGCGGC 6060  
6061 CCGGTACGCCCGGGAGCACGCCACGTGGTATAGACACCAGGCCGCCACGGAAGA 6120  
6121 GGACCTCGGGCCCTCGCCAAAGGGGTGGACCTGCTGGTCTGCCCCACGTCCCCGACGC 6180  
6181 CCTGGCCCTGGAGGCCCTCTGGCCACCTTGAAGCCCTGCGGGGGCGGAGGCCGCTT 6240  
6241 CCGGGTCTCTGACCATGCTGCCCCGCCCGGAGCCGGGACGGGAGGAGGCCGGGC 6300  
6301 CCTCTTGGGGCGGAGGGCGTCCCTCTTACAGGCTGGGTGAGGCGGGCGGAGCCTT 6360  
6361 CCCCAGGCCGCCCTCTGGGGGTGCTGTCTACGGGTGCCGACCCAGGGCGAGGCT 6420  
6421 GGCTGGGGGACTACGCCGGGTGGGGAGAGCTCCTGAAGGAGTGGGGGATGAGC 6480  
6481 AAGTTCGCAAGCTCTCAAAGAGSTCAAGGAGAAGGAGGAGGCTCCGGGAGCGGCT 6540  
6541 CCGGGGAAGAGCCGGCGGAGGACTACGTGGCCATGAAGGTCTACATCAGCAAGAGCTT 6600  
6601 CACCGAGGCTGAAGCTGAAGGCCCTGGAGGAGGAGAAGGAGCTTTCGAGCTGGTGGAA 6660  
6661 GAGGCCCTGAGGAAGTGTGCTGGTGGACCTCTCCGCTCTGAGAGCTGAAAGGAGG 6720  
6721 TAAGACGATGGTACCTTAAACAATCGCCCTAGAAGCCCTACGCGGGCACTCCCC 6780  
6781 CCAGGAGGCGGGCGTCTCTCGAAGCGCTGGTCCGCAAGATATTGAAGAACTCCACC 6840  
6841 CCATCTGGAGCCAAGAGTCTGTGATGTGCTCCCTTGGTCCGAGCACGCCACCGCAAGG 6900  
6901 GGCTCAGGGCCACGGACATCGGCTGGACCTGGTGGCTACGGGAAGGACGACAAGGCT 6960  
6961 ACGCCATCCAGTCAAGCTGTGGGATAAGCCCTCTCTTGAAGGACCTGGGGAGCTTCG 7020  
7021 TGGGGTGGTGAACCACCCGAGTACGGCTTCGACCAGGGCTCATGCTGGCCCCAAGAG 7080  
7081 GCCTGACCAGGAGGCCGACCGCAGCTCCAGGGCTACCATCACCCTCTGAGCGAAG 7140  
7141 AGGCTCTCTAGAAGACCTGGACCTGGAATCCCTCGTTCAGACCGCCCCGAGGAAGCCC 7200  
7201 GCAGGCGGGGAAGAAGGCCCTCCGTAAGTACCAGCAAGAAGCCTTAGAGGAGGTGGCCA 7260  
7261 AAGCCTTCTTAGAGAAGGGCTGCCCGGGCAAGCTCATCATGCCCGGACCGGCA 7320  
7321 AGACCTGGTGGCCCTCAAGATCGCCGAAAAGGTGGCGGGCCCGGGGGAGGGTCTCT 7380  
7381 TCCTGGCGCCCTCATCGCCCTCTGGACCACTCCCTCAGGGCTTGGGCGGCGGAGGCTT 7440

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FIG. 7E

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7441 CCTGCCCTTGGCCTCTTCGCCGTGGTCTCGGACACGGGCGTGGGCAAGACCTCGGAGG 7500
7501 ACGACCTCTCGCCCTCTCCCTCTCTCCATCCCTCTACCACCAAGCCTGAGGAGCTGG 7560
7561 CCTCCGAGGCCAAGACGGAGAGTCAGGAGGCCCTACCGTGGTCTTCTCCACCTACCACT 7620
7621 CCGCGAGGTCCTGGAGAGGGCCAGAAGGAGCACGGGCTTCCCTTTTGACCTGATGA 7680
7681 TCCTGGACGAAGCCACCACAGCCACGGTGCGGGCGGAGAGAAAGCCCTTCACCA 7740
7741 AGGTGCACACGACCACTACGTGAAGGCCGCCACCGCTTACATGACGGCCACGCCA 7800
7801 GGATCTGGGAGGTGGAGGGGAATGGAGAGGGGCCAAGGGAAAAGGCGGGGAAAAGA 7860
7861 AGGACCTCAGAAAGAGGGTTCTCTCCCTTTTGACCTCGGTGCCTCTCTACGGAGG 7920
7921 ACTCCACGGCCCCGAAGGGTGGAACTCTGGTCTACTCCATGGACAACGAGGGGATCT 7980
7981 ATGGCCCCACCTCTACGAGTACACCTTACCCGCGCCGTGAAGGAGGGCCACCTGAGCG 8040
8041 ACTACAAGGTCATCGTCTTCTCCGTGGCGGAGGAAGCCAAAAGGACCTGGCTCTTACC 8100
8101 TCCAGGGACCCGAGGCCCTCAAGGTGGAGGAGGCTCTGAAGGCCCTGGGCTGTGAAGG 8160
8161 TCCTCCAGGGGAGGTGCGGACGAGGAGGGGAACCCGATGGGGGCCCTCGACCTGCGGA 8220
8221 GAGTCATCGCTTCCACGGCCGGTGAAGGAGTCCAAGGAGATGGAGGAAGTTCACGA 8280
8281 AGGTGGCCCTCGCTGCCAGCAGGCTGGCTCTTCCGAGGAGCTCCGGCGGGTGGAGG 8340
8341 TGAAGCACATAGACGGGCAGATGTCCGCTATGACCGGAAGCGCTCTGGAAGGCTTA 8400
8401 GGGAGAACGTCCCCGAGGGGAGGTCCGCTCTCACCAACGCCAAGTCTTACCGAGG 8460
8461 GGATCGACGTCCCGGCCCTAGATGCCGTGGCTTTCATGCGTCCCGGGACAGCGTGGTG 8520
8521 ACGTGATCCAGGCCGTGGGGCGGGCATGCGCAAGGCCCGGGCAAGGAGTACGGTACG 8580
8581 TGGTCTGCCCCGTGGTGGTGGAGGGGAGGACGAGGAGCGGAGATCGAGGAGAGCGGT 8640
8641 ACCGGCGGTGTGGCAGTGCTCTCGGCTTGGCTCGGTGGACAAGTCTTTCAGGGCC 8700
8701 GCATGCGGGCCGCTGGTGGCTCTCGGTAAGGGCGAGGGCGGGAAGGTGGAGAGG 8760
8761 CCCGAGAGGGTGTGGCCGTATCGGGGAAGGAAGCGCTCCCCGTGATCGTAGATGTCC 8820
8821 TTCAGGGGAACCTCAACCTCACCAGGAGATCACCGGAGCTCGCGGCAAGCTGGTCA 8880
8881 GGGCCCTCGCCCTGGGGCGGAAGTACCTGGAGAAGTGGGCCAGGACGTGGCCGGGTGG 8940
8941 CGAAGGTGCTGGAGCAGCAGGTACGGCGATGGCGAGCGGACCCCAAGGTGAAGGAAA 9000
9001 AACTGGGGAACTCTCGCCGCCCTGCAGGCCCTTACCAGCGAGCGTGACGGAGGACG 9060
9061 AAGCCATCTCATGCTGGTCCAGCACGCTCTACCAAGCCCATCTTCGACGCCCTCTCG 9120
9121 GGGAACTCCTAGAAAAGCGGGAGGACCCGTTTCCCGGGCCCTAGACGAACCTTCCAGG 9180
9181 AGTTAGGGGGTTCCTGGACCGGGAAGGGAGGCCCTCAAGGATTCTACGAAGAGATGC 9240
9241 GCCTCAAGGCCCTAGGGCTCACGGACGAAGCCGAAAGGGCCGACTTCTACGAGGCTCT 9300
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FIG. 7F

ACTCCAACCTCTTCGCCCGGGCTTCCCCAGGTG6CCGACCAGGTGGGGATCGCCTACA 9360  
9301 CCCC6GTGGAGCTGGTGGACTTCTGGTGAAGAGCGCAGAGCTGGCCAGGAAGCACT 9420  
9361 GTTGGCCGGGGCTCGATGGGAGAAAGTCTTCATCCTGGAGCCCTTCGCCGGCACAGGC 9480  
9421 ACCCTCGTCACCCGAATCTGCACCGGTAGCCGAAAGGGCGGGGCGGACGGTCAAG 9540  
9481 GGCAAGCTGGAGCGGGGAGATCTGGGCAACGAGATCCTTCTCCTCCCTACTACGTC 9600  
9541 CTCAGGGCAACGTGGAGAACACCACCTGGCCCTGACCGGGGAGTACGTCCTTCAAG 9660  
9601 GGGGCGTTCGGCGACTCTTCGGCTGGCGGAGCTGGGTATAGCGAGAAAAGTTGG 9720  
9661 CATCATCCGCTCTTCCGGAAGAATACGGTGAGGCCCTGAACGAGCAGCTGAAGGCCCC 9780  
9721 TATCCAGGTTATCCTCTCAACCCCCGTGGGCTTGGTTGGAGAAGGAGGGGAGGGG 9840  
9781 AAGAAGAACCCGTCTACCGTAAGGTGCGGAGCGGGTGGAGCAACCTATGTACGGCGG 9900  
9841 GCCAAGGAACCTCCCATCGGGGGACAAAACCAAGGAGAGAACTGAACTCCCTCTAC 9960  
9901 GACCAGTACATCCAGGCTTGGCGGTGGCGAGCGACCGTATCGGGAGGAGGGGTCGTG 10020  
9961 GCCTTCGTACCAACAACGGGTGGTGGGGGCGTAGTCCCCGGGGCTTGGGGCCCTCT 10080  
10021 TTGGCGGAGGAGTTCGCCAGGTGTACGCTACGACCTGAGGGGGATGCGAGGAGAAG 10140  
10081 GGGGAGGACGGAAGAAGGAGGGGGCGGGTCTTTGGACAGCCTTCCCGCCCGGGGTC 10200  
10141 TGCTCTCTCTCTGGTGAAGCGTAAGGACCACAAGGATCGGCAAGTCCACCTCTAT 10260  
10201 CGGTCGGGACGCGCTCTCCGGGAGGCCAAGCTGGCTCTGGTGAAGGAGATGGCTCA 10320  
10261 GTCTCTGGGTTCCCTGGCAAGAGTTCCTATGAAGAGTGGGTGGGAGGCTTACCCCG 10380  
10321 GGTCTCGGGATGTTGTCTTGGACGAGGCTTTGAGGTGCGGAGTCTGGGGTGAAGA 10440  
10381 CCAACCGCATGCGTACGCTTCAACCCCTCCGGGCGGAGCTGGAGCGGCACATGAGGC 10500  
10441 GGCTCATCTCCACCTACAAGGACGCTGAAAAGGAAAAAGAGGGGAACTAGGGGAAC 10560  
10501 TGGAAAAGGATGAGAGCATCATCAAGTGGGATAGGGAACCTATCAGGTACCTAGAGTCCC 10620  
10561 TGAGGGAAGCTTCTACGAAGGAGCGGTCAAGTCTACGAGGCCCTTACCGCCCTTCG 10680  
10621 TGCTATGTACCTTACCTCAGCCGACCTTCAATAGCATGATTACCAATCCCCGCA 10740  
10681 TCTGGCCACCCCGAGGCGGAGAACCTGGCCATCGCCGTGGCCGAAAGGGAGTAAGC 10800  
10741 CTTTATAGCGCTGTGGCCACGAGGAGGTGGTTGACCTGCACTTTATTGAGACCACCCAGC 10860  
10801 TCTACCCCTTTACCACTACCCGAAACAGCCCTCTGGGGGACACCCAAAGCGCAAGC 10920  
10861 TCAACCTCAAGGAGGAGTCTTGAGGAAGCTTGGGAGGCTCTCGGCCGCCCTTCCCC 10980  
10921 CCGAGGAGGCTTCTGCTTACATCTACGCGTGGTGAGCCACCCCTCTACGCCGAGCGCT 11040  
10981 TCGCCAAGGACCTCAAGATGGACCTCCCCCGATTCCCTCCCCAAGATCCGAACCTCT 11100  
11041 TTGCGAGGCTGGTGAAGCGGGTCAAGAACCTATTACCTCCACACCGAGTACGAGACCC 11160

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## FIG. 7G

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11161 TCCCCCTGGAGCCAGTCCCCCTTCGGGTGGAAGAGGGAGGCCCGGAGGACCTACGA 11220
11221 GCGCTACCGGTGGAGCGGATGAGGCTGGACAAGGAGAGGGTTCTCCAGTACAACGA 11280
11281 CTGGGTCCGGGTGGAGGGCATCCCGAGGAGGCCCTCCGCTGGCGCCCCGGGGTACTC 11340
11341 CCCCTTGGAGTGGATTGCCCCTTCTGGAAGTGGAGGAGAAGTGCCCAAGGGCAGGGG 11400
11401 GGAGGCCATCGTCTGGGACCCCAACCTCTTCTCAAGGAGAAGGGGAACCCGTTACCT 11460
11461 CCTGGACCTCATCGGGCGGGCGGTCCAGGTGGCCGTGCAGACGGTGGGATCCACGAGGA 11520
11521 GCTGAGAGAAGACGTGGAAGCTCTGCTGGGTGAGGGGTGCTGGCCCCGCGTTCTCCCT 11580
11581 ACTCCTTTAGGGCTACCCCTACGATCCAAGCACGGCCCTGGGGGGCGCTCAGGTGGGA 11640
11641 TCCCACGTCCAAGGCCCGACTTGGGCACCCCATGCTGCGAATTACAGCCCAAGGGCT 11700
11701 GAAACATTCCCCCTGCTCAGGGGGAAAGTTCGTGAAGGAAAGAGCAAAGCCTTTTTTA 11760
11761 TCGCATCCGGAGAGATGGCGGGTGGAACTTTTCCCGAGGACTCCCCATAGGGACATG 11820
11821 TAAACGGCAAGCTATCAGTGTAGACTTTTTCAAAAGAGCCATACTCGTGTTCCTCCCT 11880
11881 TCAGAACGGCATTTTGTAAAGGAGGTGGTTTACAAATGGGTGTTAATGCGCTACATCCT 11940
11941 CCGGTAGTAGGAGCATGC 11958
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